THE OFFICE OF CLEAN ENERGY DEMONSTRATIONS

OCED
Office of Clean Energy Demonstrations

Overview

The U.S. Department of Energy (DOE) established the Office of Clean Energy Demonstrations (OCED) to help scale the emerging technologies needed to tackle our most pressing climate challenges and achieve net zero emissions by 2050.

OCED received more than $25 billion in funding from the Bipartisan Infrastructure Law and Inflation Reduction Act to deliver clean energy demonstration projects at scale in partnership with the private sector to accelerate deployment, market adoption, and the equitable transitionto a decarbonized system.

Center of Excellence

As a center of excellence for project management oversight, OCED will apply lessons learned from past DOE demonstrations and the private sector to enhance how it oversees projects. OCED will also support other offices to ensure a consistent approach to implementing these projects across DOE.

OCED seeks to become a center of excellence in advancing energy and environmental justice in large-scale demonstration projects to support an equitable clean energy transition. OCED will ensure the workforce and local communities are a key part of the solution to build an equitable clean energy future.

What Does OCED Do?

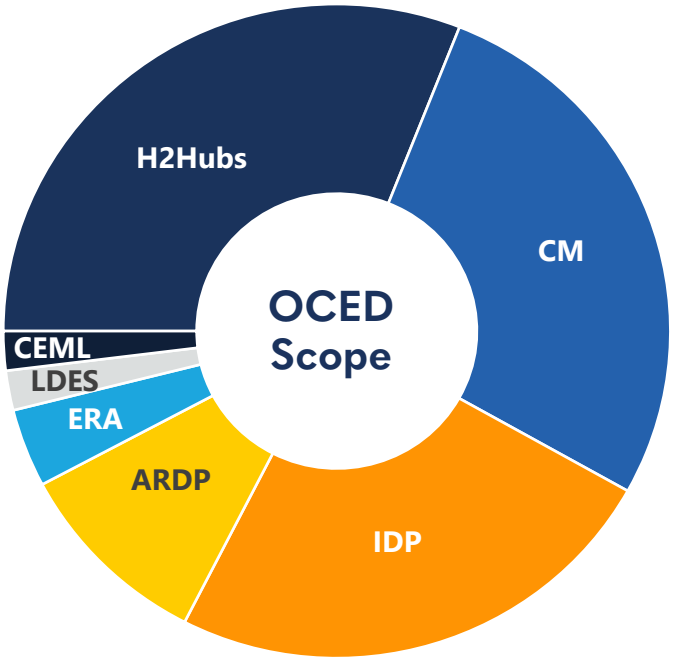
OCED is a multi-technology office with demonstrations that include clean hydrogen, carbon management, industrial decarbonization, advanced nuclear reactors, long-duration energy storage, demonstration projects in rural or remote areas and on current and former mine land, and more.

The technologies in OCED's portfolio face significant barriers to scale. OCED's role is to address these barriers and help de-risk them. Central to OCED's approach is consistent engagement with a wide range of stakeholders and pursuit of projects that advance an equitable transition by providing benefits to communities across America.

Most of OCED's projects are structured as collaborative partnerships that use cost share agreements. OCED will provide up to 50 percent of the funding in its public-private partnerships, assisting its industry partners with the early steps to commercialization and deployment.

Project Portfolio

- Regional Clean Hydrogen Hubs (H2Hubs) $8 billion
- Carbon Management (CM) Regional Direct Air Capture Hubs, Carbon-Capture Demos & Large-Scale Pilot Projects $7 billion
- Industrial Demonstrations (IDP) $6.3 billion
- Advanced Reactor Demonstration Projects (ARDP) $2.5 billion
- Energy Improvements in Rural or Remote Areas (ERA) $1 billion
- Long-Duration Energy Storage Demonstrations (LDES) $505 million
- Clean Energy Demonstrations on Mine Land (CEML) $500 million



National Environmental Policy Act

What is the National Evironmental Policy Act?

The National Environmental Policy Act (NEPA) was signed into law on January 1, 1970. NEPA ensures agencies consider the significant environmental consequences of their proposed actions and inform the public about their decision making. Countries and non-governmental organizations all over the globe have created their own environmental impact assessment programs, modeled upon NEPA, making NEPA an international catalyst in the field of environmental protection.

In 1978, the Council on Environmental Quality's (CEQ) issued regulations (40 CFR Parts 1500-1508) to implement NEPA. These regulations are binding on all federal agencies.

> *In particular, [NEPA] requires Federal agencies to provide a detailed statement on proposals for major Federal actions significantly affecting the quality of the human environment. The purpose and function of NEPA is satisfied if Federal agencies have considered relevant environmental information, and the public has been informed regarding the decision-making process. NEPA does not mandate particular results or substantive outcomes. NEPA's purpose is not to generate paperwork or litigation, but to provide for informed decision making and foster excellent action (40 CFR 1500.1).*

When does NEPA apply?

All projects, including any potential connected actions (40 CFR 1501.9(e)(1)), receiving financial assistance from DOE must be reviewed under NEPA. The first step in the NEPA review process requires financial-assistance recipients to submit information on the potential environmental impacts of any project receiving DOE funds, as outlined in the OCED program's Funding Opportunity Announcements.

DOE follows the CEQ's NEPA-implementing regulations, which also allows federal agencies to develop their own NEPA procedures that supplement the CEQ NEPA regulations. Therefore, all projects must comply with both the CEQ and DOE's NEPA Implementing Regulations (10 CFR Part 1021).

How can NEPA be efficient and effective?

NEPA reviews may include tiering, supplementing, adopting, or preparing joint federal or state NEPA documents. More details on NEPA streamlining can be found in CEQ and DOE's NEPA Implementing Regulations.

How is NEPA an umbrella statute?

Most agencies, including DOE, use NEPA as an umbrella statute — NEPA provides framework to coordinate or demonstrate compliance with any studies, reviews, or consultations required by any other environmental laws. To integrate the compliance process and avoid duplication of effort, NEPA regulations specify that, to the fullest extent possible, agencies must prepare the EIS concurrently with other environmental requirements.

National Environmental Policy Act

What are the different types of NEPA analyses?

OCED must determine at the earliest possible time whether any proposed project qualifies for a categorical exclusion under 10 C.F.R.§ 1021.410 or will require further environmental. Below are the different types of NEPA analyses.

Categorical Exclusion (CX)

- A categorical exclusion is a category or type of action that has been found to have no potential for significant impacts on the human environment under normal circumstances.
- A CX may be prepared when an action fits within the category of actions described in a specific CX which are listed in Appendix B of DOE'S NEPA Implementing Regulations (10 CFR Part 1021) and there are no extraordinary circumstances.

Environmental Assessment (EA)

- An environmental assessment is a concise document used to comply with NEPA when a CX or EIS is not appropriate.
- EA's must provide sufficient evidence and analysis for determining whether to prepare an environmental impact statement or a finding of no significant impact.
- Appendix C of DOE's NEPA Implementing Regulations lists potential projects that fall under EA's.
- An EA must be completed in one year and be 75 pages or less, unless exemptions are approved by a senior agency official.

Supplemental Analysis (SA)

- A supplemental analysis is a DOE document used to determine whether a supplemental EIS should be prepared pursuant to 40 CFR 1502.9(c), or to support a decision to prepare a new EIS.

Environmental Impact Statement (EIS)

- An environmental impact statement is required when a proposed action is expected to, or has the potential to result in significant effects on the human environment.
- An agency can determine an EIS is required based on the proposal. If the action appears on the agency's list of actions normally requiring an EIS, there is incomplete or unavailable information to the extent that a FONSI cannot be supported, it is legislatively or judicially mandated, or based on the completion of an EA.
- Appendix D of DOE's NEPA Implementing Regulations lists potential projects that fall under EIS's.
- An EIS must be completed in two years and be 150 pages or less, unless exemptions are approved by a senior agency official.

What goes into a NEPA document?

The content of a NEPA review depends on the type of NEPA analysis (CX, EA, EIS, or SA) and the type of project OCED is reviewing. Typically for an EA or EIS, the documents will include a purpose and need statement, detailed description of the proposed action and alternatives, description of the affected environment that could be impacted by implementing any of the proposed alternatives and reasonably foreseeable trends and planned actions, and discussion of how the condition of a resource would change through direct, indirect, and cumulative impacts as a result of implementing each of the alternatives under consideration.

Details on the required content of NEPA documents can be found in CEQ and DOE's NEPA Implementing Regulations.

When and how can the public play a role in the process?

There are several opportunities to get involved in the NEPA process:

- When DOE revises or prepares its NEPA procedures.
- Prior to and during preparation of a NEPA analysis.
- When a NEPA document is published for public review and comment.
- When a final decision is pending before the agency decision-maker.
- When monitoring the implementation of the proposed action and the effectiveness of any associated mitigation.

Additional information can be found through the DOE's Office of NEPA Policy and Compliance, OCED's NEPA program, or by emailing OCED@hq.doe.gov.